

KOHLER COMPANY

EXECUTIVE ORDER U-R-060-0072

New Off-Road Compression-Ignition Engines Page 1 of 1

Pursuant to the authority vested in California Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-19-095:

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)					
2021	MKHXL03.4TDS	3.359	Diesel	8000					
SPECIAL	FEATURES & EMISSION C	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
Modu Cata	onic Direct Injection, El le, Diesel Oxidation Ca alytic Reduction – Urea lation, Turbocharger, Al Catalyst	talyst, Selective , Exhaust Gas	Off-Road Crane, Loaders, Tractor, Pump, Generator Set						

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED	EMISSION			I	EXHAUST (g/kw-l	nr)		OPACITY (%)		
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.04	0.21		0.2	0.01			

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

BE IT FURTHER RESOLVED: The listed engine family is conditionally certified pending submission of additional test data to verify compliance with useful-life emission standards. The manufacturer has until May 10, 2021 to provide test data to confirm or correct the certification emissions levels on this conditional certification. Failure to resolve concerns by the specified date, shall be cause for the Executive Officer to rescind this conditional certification, in which case all engines covered under this conditional certification would be deemed uncertified and subject to civil penalties pursuant to Health and Safety Code Section 43154.

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed on this <u>30th</u> day of December 2020.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-060-0072

Family: MKHXL03.4TDS

Attachment Last Revised: 12/10/2020

					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fuel		Peak Torque -	Peak Torque -	Peak Torque -	Peak Torque -				
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units	Peak Torque	Units	Speed (rpm)	Fuel	Fuel Units	OBD	GHG	Special	Notes
																			DDI, ECM,
KDI 3404TCR/22H	N/a	N/a	14	3.359	Liters	134.1	horsepower	2200	38.1	lb/hr	368.8	lb-ft	1400	26.3	lb/hr	N/a	N/a		DOC, SCR,
RDI 34041 CN ZZII	IN/ G	111/4		3.333	Litters	154.1	Horsepower	2200	30.1	15/111	300.0	lb it	1400	20.5	10/111	14/ 4	147 a		EGR, TC,
																			AMOx
																			DDI, ECM, DOC, SCR,
KDI 3404TCR/22I	N/a	N/a	14	3.359	Liters	120.7	horsepower	2200	35.6	lb/hr	368.8	lb-ft	1400	26.3	lb/hr	N/a	N/a		EGR, TC,
																			AMOx DDI, ECM,
VD1 2404TCD /2214				2.250		100.6		2200	22.2	11. /1	260.0	и с	4.400	26.2	11.71	,			DOC, SCR,
KDI 3404TCR/22M	N/a	N/a	14 3	3.359	Liters	108.6	horsepower	2200	32.3	lb/hr	368.8	lb-ft	1400	26.3	lb/hr	N/a	N/a		EGR, TC,
																			AMOx
																			DDI, ECM,
KDI 3404TCR/22L	N/a	N/a	14	3.359	Liters	100.6	horsepower	2200	28.7	lb/hr	361.4	lb-ft	1400	25.9	lb/hr	N/a	N/a		DOC, SCR,
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																-			AMOx DDI, ECM,
																			DOC, SCR,
KDI 3404TCR/25A	N/a	N/a	14	3.359	Liters	100.6	horsepower	2500	28.7	lb/hr	361.4	lb-ft	1400	25.9	lb/hr	N/a	N/a		EGR, TC,
																			AMOx
																			DDI, ECM,
WD. 040470D (001)	,			2.250		100.5		2222	22.2		250.0	ш. б.	4.400	25.2		,			DOC, SCR,
KDI 3404TCR/22N	N/a	N/a	14	3.359	Liters	108.6	horsepower	2200	32.3	lb/hr	368.8	lb-ft	1400	26.3	lb/hr	N/a	N/a		EGR, TC,
																			AMOx
																			DDI, ECM,
KDI 3404TCR/22O	N/a	N/a	14	3.359	Liters	134.1	horsepower	2200	38.1	lb/hr	368.8	lb-ft	1400	26.3	lb/hr	N/a	N/a		DOC, SCR,
KD1 54041CN 220	IN/ a	IN/ a	1-4	3.333	Liters	154.1	Horsepower	2200	36.1	10/111	308.8	ID-IC	1400	20.5	10/111	IN/a	IN/ a		EGR, TC,
																			AMOx
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